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(56) Documents Cited

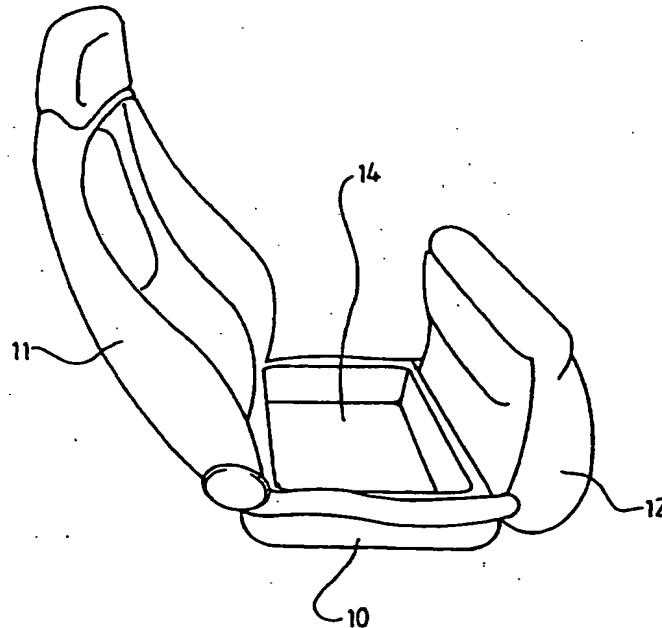
FR 002724606 A1 US 5182888 A US 4697664 A  
US 3880458 A

(58) Field of Search

UK CL (Edition O) A4L LAAB LABG L109, B7B BEA  
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(54) Folding seats for motor vehicles

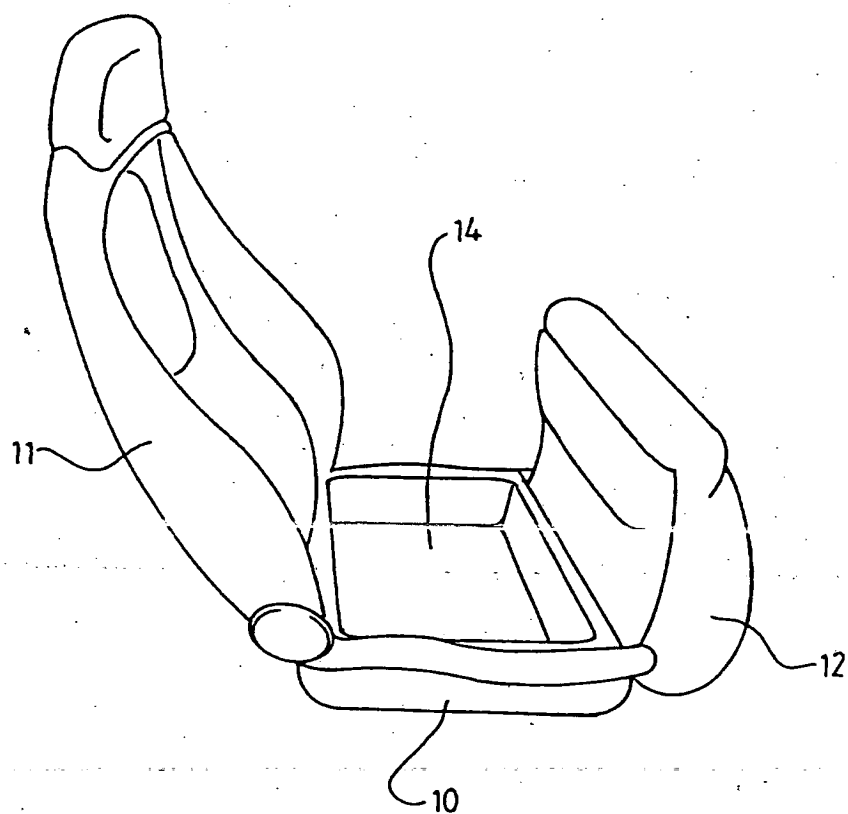
(57) A seat for a motor vehicle comprises a base part 10 and a back rest 11. Within the base part 10 there is a storage space 14, which is accessed by moving the seat cushion 12 between a seating position in which it covers the space 14 and an open position. Preferably this is done by pivoting the cushion 12 about a horizontal axis at the front of the seat base 10. Also preferably the space contains a removable insert.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995.

GB 2 316 608 A



Title: Seats for motor vehicles

Description of Invention

This invention relates to seats for motor vehicles. A seat in accordance with the invention has been devised for use in motor vehicles such as passenger cars, but it is to be appreciated that seats in accordance with the invention are also usable in other vehicles.

The invention is concerned with the provision of space for receiving an article or articles of luggage. It is of course possible for an article of luggage to be placed on a vehicle seat with the weight of the article supported by the cushion portion of the seat and the article resting against the backrest portion of the seat (which portion is usually called the squab and will thus be referred to herein) to assist in retaining the article in a required orientation. However the article is unconstrained against movement under vehicle acceleration, braking, and cornering forces, leading to the possibility of damage to the article and/or danger to the vehicle's occupants under driving conditions. Further an article thus carried can damage or soil the seat, and additionally is visible and vulnerable to theft from an unattended vehicle. It has been proposed that a drawer can be provided in the base of a motor vehicle seat, beneath the cushion portion thereof, which addresses the above problems but the size of articles which can be accommodated by such a drawer is severely limited.

It is broadly the object of the present invention to provide a motor vehicle seat in which the above referred-to problems are overcome or reduced.

According to the invention, we provide a motor vehicle seat including a base portion affording a space for receiving an article or articles, and a cushion element moveable between a seating position wherein it covers said space and an open position in which it provides access to said space from above.

Preferably the cushion element is pivotable between its two positions, and advantageously such pivoting movement is about an axis which is disposed at or towards the part of the cushion element furthest away from the squab of the

seat, ie at the front of the seat if it faces in the normal direction of travel of the vehicle.

Thus a seat in accordance with the invention has a cushion element which when in its seating position closes the top of the space afforded in the base of the seat whilst when the cushion element is pivoted leaves the space open from above. When in the latter position an article or articles can be placed in or removed from the space, and if the article or articles are sufficiently small the cushion element can be returned to its seating position thereby concealing the article or articles from view. With a large article or articles, accommodation in the space of the base of the seat constrains it or them against free movement when the vehicle is driven, with the potential benefits of minimising damage to an article or the vehicle, and improving safety of the vehicle's occupants.

The base of the seat preferably is provided with an article-receiving member which conveniently is in the form of an open-topped tray having a base and sidewall portions extending upwardly from the base. Preferably such member is removable from the base of the seat, and it may be provided with means such as appropriate recess formation or the like for holding articles such as bottles upright. Such an article-receiving member is preferably of plastics material.

It will be appreciated that some seats for motor vehicles are mounted in the vehicle by mounting means which provides for positional adjustment of the seats, and characteristically such mounting means comprises runner assemblies disposed one at each side of the seat for for and aft positional adjustment of the seat. In a seat in accordance with the invention, the space between such runner assemblies may be utilised for article storage with the advantages above described but without the disadvantages associated with the provision of a drawer in a seat base as above referred to.

The intention will now be described by way of example with reference to the accompanying drawing, which is a diagrammatic perspective view of an embodiment of seat in accordance with the invention.

Referring to the drawing, there is illustrated a seat for a motor vehicle which seat comprises a base portion 10 and a back rest or squab 11 which extends

upwardly from the base portion 10 and may be adjustable in respect of its angle of inclination relative to the base portion. A cushion element 12 is pivotally secured to the base portion by appropriate pivot means disposed at or towards the forward end of the base portion. Within the base portion 10 there is defined a space 14 in which may be received an article or articles.

The cushion element 12 is pivotable relative to the base portion 10 of the seat between a raised, open, position in which it is illustrated and in which access from above is provided to the space 14 in the base of the seat, and a more or less horizontal seating position in which it covers the top of the space 14 and is able to be sat upon in conventional manner.

Preferably there is means for retaining the cushion element of the seat in the position in which it is illustrated. This may be a catch of some form, or alternatively the pivot means by which the cushion element is secured to the base may include a detent mechanism, an overcentre device, or the like.

Preferably there is an article-receiving member in the form of an open-topped tray member which occupies the space in the seat base 10 and into which an article or articles may be placed. Such a member conveniently is a plastics material, and is removable for cleaning or other purposes.

The features disclosed in the foregoing description or the accompanying drawings, expressed in their specific forms or in terms of a means for performing the disclosed function, or a method or process for attaining the disclosed result, as appropriate, may, separately or in any combination of such features, be utilised for realising the invention in diverse forms thereof.

## CLAIMS

1. A motor vehicle seat including a base portion affording a space for receiving an article or articles, and a cushion element movable between a seating position wherein it covers said space and an open position in which it provides access to said space from above.
2. A seat according to Claim 1 wherein the cushion element is pivotable between said two positions.
3. A seat according to Claim 2 wherein said pivoting movement is about an axis disposed at or towards a part of the cushion element furthest away from a squab of the seat.
4. A seat according to any one of the preceding claims wherein the base portion is provided with an article-receiving member in the form of an open-topped tray having a base and side wall portions extending upwardly from the base.
5. A seat according to Claim 4 wherein said member is removable from the base portion of the seat.
6. A seat according to Claim 4 or Claim 5 wherein said member is provided with recess formations or the like for holding articles.
7. A seat according to any one of Claims 4 to 6 wherein said article receiving member is of plastics material.
8. A seat according to any one of the preceding claims comprising means for retaining the cushion element of the seat in said open position.

9. A seat substantially as hereinbefore described with reference to the accompanying drawings.

10. Any novel feature or novel combination of features described herein and/or in the accompanying drawings.



Application No: GB 9618066.6  
Claims searched: 1-9

Examiner: Jason Scott  
Date of search: 18 November 1997

## Patents Act 1977 Search Report under Section 17

### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.O): A4L (LAAB, LABG), B7B (BLB, BEA), B7J (J64, J66)

Int CI (Ed.6): B60N 2/24, B60P 3/32, 3/36, 3/38, B62K 19/46

Other: ONLINE: WPI

### Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	US5172788	HONDA See column 3, lines 37-43 and figure 2.	1-4 & 7
X	US4697664	HONDA See column 2, lines 47-51, and figure 2.	1,2
X	US3880458	JACKSON See column 2, lines 33-39, and figure 5.	1-3
X	FR2724606	CITROEN See figure 1.	1,2

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.